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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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MEMORIAL TO CONGRESS.

The Lake Carriers' Association has filed petitions with the senate and house committee on appropriations asking congress at the present session to make the following appropriations: Light and fog signal, North Manitou Island, $20,000; light and fog signal, Middle Island $20,000; range lights and fog signal, Death's Door Passage, $21,000; light and fog signal, Crisp's Point, $20,000; light and bell, Grand Marais harbor of refuge, $15,000; on Grassy Island, Detroit River, ranges, $6,700; four gas buoys for Gravelly Island and Lansing Shoal, $10,000; fog signal at Cat Head Point, Lake Michigan, $5,500; fog signal at Eagle Harbor, Lake Superior, $5,500. In its petition the association calls attention to the fact that at this session of congress there will be no river and harbor bill. The amount of the appropriation required to provide for all the new lights and signals asked for in this petition is only $123,700, or $30,000 less than congress appropriated at the last session for this purpose. "We respectfully submit, therefore, that in making provision for all the lights and signals above enumerated, we are not making any excessive demand upon congress, but are actually asking for less than has heretofore been appropriated."

With reference to the Grassy Island lights, the association says they are inexpensive, needed to complete the ranges for running the Detroit River. They have been earnestly recommended by the light-house board. They are needed to keep the enormous tonnage using the Detroit River off from the dangerous shoals which extend from Fighting Island. Their erection will fully complete the lighting of the Detroit River.

The United States, says the petition, has been for a century actively at work in perfecting its lighting system on the seacoast, and particularly on the Atlantic and gulf coasts of the United States, but that the lighting of the lakes has been very largely a matter of the last twenty years. It is no wonder, therefore, that on these large bodies of water there are still long stretches and dangerous points unprotected by the proper lights and signals. The lake commerce itself has been more than doubled in the last decade, both in amount of traffic and in number and value of vessels. The discovery of new mines on the coast of Lake Superior, the seeking of a new timber supply, and the great development of wheat-growing and flour-milling in the Northwest have been constantly opening up new ports and new routes for vessels and making necessary lights and signals along these routes, which were not formerly needed. Congress has recognized these facts, and has met the necessities of the case from time to time, recognizing fairly and justly the needs and deserts of the lake commerce. We have sought to be equally fair in presenting our claims for a continuance of such recognition.

THE REVENUE MARINE SERVICE.

The work performed by the Revenue Marine Service, of which Capt. L. G. Shepard is chief, is very commendable. During the past fiscal year 35 vessels have been in commission and constantly engaged in patroling the coasts, lakes, rivers and harbors of the United States, for the protection of the revenue and the enforcement of the laws relative to kindred legalities. The aggregate number of miles cruised by these vessels were 308,682; 482 merchant vessels were found violating the law; number of vessels in distress assisted, 70; value of the same and their cargoes imperiled by the sea, $1,709,105; 87 lives were saved. The revenue cutters during the year rendered material assistance, as customary, to the Life-Saving Service, but it is generally admitted that a number of new vessels are urgently needed for the proper maintenance of the Revenue Marine Service, for many of those now in commission are entirely too small, slow of speed and too old to meet their increased duties in connection with modern tonnage. The cutters at present on the Pacific coast, with the exception of the steamer Bear, are not adapted to the arduous work which of late has devolved upon them in Alaskan waters and in Bering sea. The necessary withdrawal of these steamers from the Californian and Oregon coast for duty with the Bering Sea fleet during the summer has left those districts without patrol and caused serious embarrassment to the custom service. A new steamer is needed on the Pacific coast, one at the port of New York to replace the steamer Grant, assigned to duty on Puget Sound, and one on the Great Lakes. The personnel of the Revenue Marine Service consists of 222 commissioned officers and 815 pilots and enlisted men.

CHICAGO'S GREAT DRAINAGE CANAL.

President Frank Wenter, of the board of trustees controling the great drainage canal now under construction, connecting Lake Michigan with the tributaries of the Mississippi, has been re-elected to his fourth term in that office. Mr. Wenter's annual message was a notable one. He dwelt on the advantages resulting from the board's steady exclusion of rank partisanship and strict adherence to business methods, and said: "The magnitude of the enterprise is such that even the government of the United States, had it undertaken the work, could say that it was a task worthy of a nation. The total expenditures from its inception are $10,193,130, and the trustees have on hand $2,466,388 cash. There are at present actually employed on the work 6,179 men. While the channel is primarily being built to answer sanitary requirements, present and future, nothing has been left undone to make it possible that the canal be used for navigation as an outlet to the south on assumption that the United States Government will ultimately construct the necessary link from Lockport to La Salle, a distance of 65 miles, and from La Salle to the mouth of the Illinois River, 220 miles. Already more than 40 per cent. of the material in the channel has been excavated, and the board looks forward with confidence to seeing the work an accomplished fact by the end of 1896." The president's message closes with an estimate of $27,000,000 for the whole work. It was received with approval.

TO REMOVE A LIGHT-HOUSE DEPOT.

An item in Secretary Carlisle's estimates asks congress to appropriate $35,000 to be used in removing the light-house and buoy depot, now located at Buffalo, to Erie, Pa. The officials of the light-house board indorsed the plan in the following language at their last meeting, "The depot at Buffalo is so inconvenient and so difficult of access that it should be removed to Erie, Pa., where it will be of vastly more use to the light-house service."

Although a light-house and buoy depot is not a pretentious affair, its location at a city undoubtedly contributes to its business interests. The depot at Buffalo contains supplies used by the light-house establishments of the tenth district. This district extends from Ogdensburg, N. Y., to Grosse Isle range in Michigan and includes one tender, and about fifty lights. There is an excellent harbor, plenty of ground for building a depot and storing buoys, etc., at Erie, yet Buffalo interests are averse to losing the depot established at that port for so many years and there is but little doubt that a strong effort will be made to prevent the change, although it should certainly be acknowledged that the light-house officials know best what they want and the service requires.

NEWS AROUND THE LAKES.

CHICAGO, ILL.

Special Correspondence to The Marine Record.

The steamer Missoula for corn to Buffalo at 3 cents free of elevation.

The steamer Charles Reitz arrived here Tuesday Dec. 18th with lumber from Ludington.

Palmer Cook & Calbick chrrtered the steamer Nicaragua for corn to Port Huron at 3 cents.

J. J. Rardon & Co. chartered the steamers Pasadena, Aurora and City of Glasgow for corn to Buffalo at 3 cents.

The steamer C. W. Elphicke which arrived here Sunday morning from Buffalo with coal is the last arrival from the lower lakes this season.

The steamers, Missoula, Pasadena, Aurora, City of Glasgow and Nicaragua have left this port with grain for the lower lakes since my last letter.

The Marine Iron Works, of Chicago, has been incorporated with a capital stock of $40,000. The incorporators are Chas. H. Towle, Bryan Y. Craig and L. W. Winchester.

The last of the grain fleet for this season left here Sunday night at 9 o' clock. The steamers City of Glasgow and Aurora for Buffalo and the Nicaragua for Port Huron.

At the Chicago Shipbuilding Co., the schooner John B. Wilbur is in dry dock for extensive repairs. She will come out of dock this week and the steamer Merida will go in for examination.

Capt. C. W. Lockwood of the schooner B. L. Pennington, received a telegraph message Monday from Ashtabula requesting him to come home at once as his family were suffering from diptheria.

The ball given by the Chicago Life Saving crew last Saturday night at Mueller's Hall on the North Side was a great success and the brave life-savers and their friends enjoyed themselves grandly.

The schooner Barbarian, the last of the sailing lumber fleet this season arrived here last Thursday from Marinette in good condition. She had a long trip but was none the worse for her voyage so late in the season.

Capt. Danl. McLeod, manager of Inland Lloyds and Capt. Charles K. Moore, commenced inspecting the steam and sail vessels in winter quarters at this port on Tuesday morning. The large fleet will take several weeks to inspect.

J. S. Keith & Co. chartered the schooner George Sturges for oats to Port Huron at 1¼ cents for winter storage and delivery in the spring. The barge B. W. Parker and steamer Egyptian for oats to Buffalo at 2¼ cents for winter storage and delivery in the spring.

The Northern Michigan Line steamer City of Charlevoix is in dry dock at Burger & Burger's shipyard at Manitowoc. She will be cut in two and lengthened 22 feet and will receive concave sides. The company's steamer Petoskey has been chartered by the Graham & Morton Trans. Co. for the winter months and she is running between Milwaukee and St. Joseph.

Capt. F. D. Herriman, manager of the lake department of the Bureau Veritas shipping register, will leave for the Pacific coast again directly after the holidays. Capt. Herriman classed for his association the whaleback steamer recently launched at Everett, Wash., and from this second journey to the coast it looks as if he was going to see the keel laid for another new steamer to be built under the rules of the Bureau Veritas.

W. L. Brown president of the Columbian Whaleback S. S. Co. owners of the passenger steamer Christopher Columbus, returned from New York, where he had a meeting of the directors last week. He says, "It was decided to continue the Christopher Columbus in the excursion business next season between Chicago and Milwaukee. Quite likely we will go into the freight business also between those ports. The company declared a dividend of 5 per cent for the year.

The boast that the arrivals and departures of vessels at this port exceeded the arrivals at any three seaports of the United States, which was once well based, is no longer so well founded. Up to last week the arrivals at the port of Chicago for the season were 7,462. This is the smallest number of arrivals shown on the records at the barge office, which began in 1873. The highest number of arrivals was in 1880, when 12,788 vesseis were recorded. The cause for the decrease is, of course, owing to the larger size of boats. Since 1880 the average tonnage of arrivals has nearly doubled, and in actual freight carried there has been a steady increase from year to year, with the number of arrivals steadily decreasing. It goes to show, however, that the mosquito fleet is being wipcd out

The steamer Servia is in dry dock for extensive repairs. She will receive 243 feet of new keel, new garboards her full length, about 120 pieces of new bottom plank 5 and 6 inches in thickness, 10 afterhoods on ths starboard side, new stern post and stern pipe, part new fantail, new bulwarks around the stern, 8 new stern stanchions, 6 new upper deck stanchions, new piece of rail aft, 40 new deck beams, new main deck 110 feet 38 feet wide, new hatch coamings, several new between deck stanchions, some new bulkheads, and be recalked inside and out. The steamer John Oades has received extensive repairs and will go of dock this week and her place will be filled by the steamer D. C. Whitney, the tug Ruby was in dock for a new wheel, the tug Relief for a new stern bearing, the steamer McCormick for some new plank on her quarter and to have a leak stopped.

DETROIT, MICH.

Special Correspondence to The Marine Record.

The schooner Peshtigo will be rebuilt this winter by the Jenks Shipbuilding Co., and will be given steam at a cost of about $20,000.

During the winter the Upper Portage Canal across Keweenaw Point at that portion known as "Lilly Pond" will be widened. The purpose is to facilitate the passage of vessels through the canal.

The steamer Linden, built by the Jenks Shipbuilding Co. was launched at Port Huron Saturday. She is 203 feet keel, 35 feet beam, and 13 feet hold. She is pronounced the finest single deck steamer afloat.

A number of marine men of Port Huron and other cities will take steps during the present winter to secure for Port Huron a life saving station. As soon as statistics can be secured the matter will be presented to congress.

ters, N. C. West, S. V. R. Watson, Wayne, M. I. Wilcox,

J. J. Hill, Marine City, is getting figures on engines and other machinery for a twin screw steamer, about 135 feet long by 22 feet beam, and light draught, to run on the North Channel and to Mt. Clemens.

The Detroit Dredging Co. will work all winter on a channel they are cutting through Grosse Ile for a syndicate of property-owners and residents, the design being to improve the marsh at that locality. The tug Lorman towed down two scows this week loaded with coal to supply the dredge and tugs with fuel for the winter.

The Detroit & Cleveland Line will rebuild the cabins of the steamers City of Detroit and City of Cleveland this winter, and when they come out in the spring the two boats will haye new interior furnishings throughout. Before the opening of navigation the City of Cleveland will be put in dry dock and thoroughly overhauled.

At the annual meeting of the Wisconsin Historical Society in Madison, Dr. James D. Butler read a paper on "Early Shipping on Lake Superior." He said that the first builder of a sailing vessel on that lake was a fur trader named La Ronde, who in 1731 built a bark of forty tons burden. There was a French schooner on on the lake in 1766 and in 1770 H, Baxter built one of seventy tons burden.

Some months ago a Detroit builder offered to put up a $100,000 hotel at Sault Ste. Marie in return for a good site and a $25,000 bonus. The citizens of the Soo are enthusiastic over the proposition, and will make efforts to get the lake transportation companies, whose passenger traffic in summer would be greatly increased by such a hotel, to subscribe at least a portion of the bonus. The chances for the success of the project seem bright.

Mr. Patterson, of Manistee, Mich., a well known marine engineer, and inventor of the Patterson Vessel Draft Indicator, leaves New York on Saturday for a trip to the seaports of Europe in the interests of his device. The fact that the load line limit is strictly enforced in British tonnage ought to call for an excellent sale of the draft indicator as fitted by Mr. Patterson, and with a proper introduction there seems little doubt but that he will find a ready market for his excellent draft indicator.

The tug C. L. Boynton, owned at Port Huron, left Buffalo last Saturday night, after towing the disabled steamer Wyoming into that port. When off Marblehead, in Lake Erie, Monday night, the tug was discovered to be on fire in the rear of the pilot house. The flames gained so fast that Capt. R. P. Thompson was driven from the wheel. The fire was extinguished, but not before the pilot house was badly burned. The damage will amount to several hundred dollars, and repairs will be made here according to present arrangements.

The following named vessels are in winter quarters at this port: Steamers—B. W. Blanchard, A. Folsom, Forest City, James Fisk, Jr. R. J. Hackett, H. Houghten, Huron City, Chauncey Hurlbut, Charles Hebard, Iroquois, S. R. Kirby, Loretta, Majestic, J. V. Moran. R. Martini, J. M. Nicol, Nipigon, Ogemaw, H. H. Pickands, John Pridgeon, Jr., J. H. Pauley, Raleigh, C. H. Starke, Seattle, H. W. Sibley, Swallow, St. Paul, Toledo. Sail and consorts—Bay City, H. H. Brown, J. I. Case, Cascade, D. K. Clint, Dacotah, Reuben Doud, Fitzhugh, Galatea, Ganges, Glad Tidings, Montpelier, Mystic Star, William McGregor, Marengo, Mary Mitchell, Melbourne, E. A. Nicholson, Nirvana, Nelson, Porter, Reindeer, J. S. Richards, Senator, Tokio, Twin Sis-

Edward Henkle is having built one of the finest steam yachts on the Detroit River. Mr. Henkle placed the order with the Detroit Boat Works and after satisfactory plans were drawn work began, and is now nearing completion. She is 104 feet over all, 15½ feet beam and 9 feet molded depth. Her model indicates extreme speed, although neither the owner nor builder makes any claims in this direction. She is of pine with mahogany pilot house and deck fittings. The cabin is a spacious one and will be handsomely finished in natural woods. Her engines are being built by the S. F. Hodge & Co. Riverside iron works and are triple expansion, the cylinders being 9½ 14 and 24 inches in diameter, with 14-inch stroke. The boiler is tubular, an invention of H. H. Taylor, of the Detroit screw works. The new yacht will be out early in the season and will doubtless make all others of her size hustle when she meets them.

ASHTABULA, OHIO.

Special Correspondence to The Marine Record.

The following named craft are in winter quarters at this port: Steamers Grecian, Norman, Roman, Briton, Mariposa; whaleback barges 132, 133, 101; schooners Donaldson and H. A. Kent.

COLLINGWOOD, ONT.

Special Correspondence to The Marine Record.

Mr. George W. Brown, of Port Arthur, owner of the side-wheeler Cambria, is in town.

Engineer Lewis, of the White Liner Pacific, was called to Beachville recently to the bedside of his aged mother who was very ill

Mr. Alfred Morrill has contracted to build for Mr. MacDonald, a prominent fisherman, a tug. He will commence work on her at this port in a few days.

The owners of the steamer J. J. Long are making some important changes in her. They are in the shape of extending the cabins aft, thereby giving more staterooms and a larger saloon. It is said that the boat will ply between Detroit, French River and Killarney next season.

It is reported in town that the steel steamer Campana, owned by Messrs Smith & Keighly, of Toronto, will become the property of the Beatty Line, of Sarnia. If this should be correct, the steamer will ply on the Lake Superior route in conjunction with the steamers Monarch and United Empire.

Navigation is about closed here, but the harbor is yet clear and open. The new barge John Milne is expected to arrive yet with a cargo of lumber from Nottawasaya River. This will be her second trip. This barge, which was recently launchcd, was built by the veteran builder, Mr. Alfred Morrell. Her dimensions are, length over all, 110 feet, length of keel 100 feet, beam, 16 feet and depth 7 feet.

The wharves are surrounded with steamers, tugs and vessels, all of which are laid up for the winter. They are distributed as follows: At the railway wharf, steamers City of Midland, Pacific, Atlantic, Northern Belle, tug Hodgson and schooner J. Kelderhouse; at the town dock are steamers City of Collingwood, City of London and Favorite; in the Hurontano street slip, steamer Baltic, tugs Dalton, McCarthy, James Clark, W. J. Aikens, Vixen, Ripple, Maud S, Adrelaxa, Saucy Jim,

Ann Clark; and in the dry dock are steamer J. J. Long and dredge Challenge and tug Trudean.

The shipyards of the Collingwood Dry Dock and Wrecking Co. are a busy place. Your correspondent visited them this week. The new steamer for the Great Northern Transportation Co., of Collingwood, is being built here, not at Owen Sound as stated by one un-marine journal. The work is going on as fast as possible. about one hundred men are now employed. This number may be increased. Mr. Charles Cameron, manager of the line, says that the new boat will be a "daisy in white." The company are also contemplating some changes in the cabins of their steamers Pacific and Atlantic.

To meet the demands of their increasing trade on the Penetang, Midland and Parry Sound route, the North Shore Navigation Co. have decided to build a new side-wheel steamer. Tenders were received and the contract was let this week. Capt. John Simpson has received the order and will commence work at once. The general dimensions of the new vessel are, length, 150 feet over all, keel 140 feet, beam 24 feet, molded depth 8 feet 6 inches. New boilers to carry a pressure of 125 pounds will be put in and the engines of the company's present steamer Manitou will be used. The contract calls for completion by May 1st, 1895. Since its beginning this company has had a marvelous growth.

SANDUSKY, OHIO.

Special Correspondence to The Marine Record.

The following is a list of the steamers in winter quarters at this port: Leland, Michael Groh, H. C. Schnoor, R. B. Hayes, A. W. Wehrle, Jr., John E. Monk, Wellington R. Burt, Valley Mills, Dan Kunz, Norma, Erwin, Dan Connelly, Peerless, Ganges, City of Nicolett, Erie, Louise, City of Dresden, Johnson, W. A. Stone, Anna Robertson, Cinda, Empire. Schooners R. B. Iceman, Minx, Col. Ellsworth and Clara Horn.

CLEVELAND, O.

Special Correspondence to The Marine Record.

Mr. M. A. Bradley has ordered the steamer R. P. Ranney into winter quarters at Milwaukee.

At the annual meeting of the directors of the Ship Owners' Dry Dock Co., which will take place early in January, plans for enlarging one of the dry docks will be decided upon.

The several machine and engineering works having a marine patronage are fairly busy just at this season and in several shops extra help has been engaged to keep ahead of present orders.

President J. J. Hill, of the Northern Steamship Co., visited the Globe shipyard, on Saturday, to look at the passenger steamer Northland, now in course of construction for that company.

The many friends of Mr. William Wilson, brother of Capt. Thos. Wilson, will be sorry to learn that he is still somewhat under the weather and will be obliged to seek a warmer climate during the winter months.

Capt. Richard Neville, of the steamer John W. Moore, has arrived home from Chicago to spend the holidays. It would seem that each passing season falls lightly on Capt. Dick, as he is now looking better than ever.

The crews of the fleet owned by the Vessel Owners' Tug Co. held an enjoyable dance and banquet at the Army and Navy hall on Thursday night. Capt. William Kennedy was slated to lead off in the grand march.

At the Cleveland Dry Dock the large steel steamer J. H. Wade has been undergoing considerable repairs this week and it will take a few days yet to complete work on her. The tug Curtiss was docked prior to the Wade.

The handsome little steel steamer Pioneer, Capt. White, follows the Andaste in the Ship Owners' Dry Dock to-day for bottom repairs. The steel steamer Manola, Capt. Bassett, preceded the Andaste at these dry docks.

Mr. M. A. Bradley is taking every advantage of the fine steady weather and is not only open for charters, but has more tonnage engaged than any other individual owner on the lakes and it is his intention to keep them at it as long as the weather permits.

John R. Saltsman, superintendent of the W. L. Scott Co.'s hard coal shipping interests at Erie, Pa., died last Friday morning of heart disease at the age of 60 years. Mr. Saltsman had been superintendent for 15 years and was known to almost every vesselmaster on lakes.

The Floating Bethel in charge of Capt. Jones, has been put in excellent condition for the winter services. Among the many considerable improvements there has been a thorough system of ventilation put into the chapel and it is now one of the snuggest little places of worship in the city. As regards city mission interests there is a vast deal more work carried on from this source than any one seems to be aware of.

The Cleveland Shipbuilding Co. has laid the keel and part of the center keelson for the new boat building for M. M. Drake and others. The company is also doing a good deal of repair work to iron and steel steamers. The steamer Marina has had 24 bottom plates removed, the Andaste 14, and the J. H. Wade seven. The last named docked in the Cleveland dry-dock, and the two others in the Ship Owners' dry-dock. The steamer I. W. Nicholas will also receive repairs to injuries received last October, by collision in the St. Mary's River, with the steamer Frontenac. Three or four plates will be removed and re-rolled.

Mr. Luther Allen, secretary and treasurer of the Globe Iron Works Co., and president of the Chamber of Commerce, has been mentioned as an excellent nominee on the Republican ticket for mayor of the city. It is well known that Mr. Allen is endowed with considerable innate modesty, therefore it was to be expected that he would repudiate the honorable insinuations set afloat by his friends relative to any mayoralty aspirations on his part. However, Mr. Allen states very candidly that he does not desire the honor and even if he did, he could not accept the nomination on account of his business connections and, furthermore, that his name has been used entirely without his consent. It is to be regretted that Mr. Allen will not accept the nomination at the hands of the best citizens, especially as he is so well versed in the maritime affairs of the lakes and would, no doubt, work earnestly and advisedly for the betterment of the port and all that the consummation would mean to vessel owners and shippers. Mr. Allen is wedded to the project of a greater Cleveland, and I surmise that the best way to bring the "greater" about is by facilitating transportation and commerce.

At a meeting of the finance committee of the Lake Carrier's Association held on Tuesday at the office of the president, Capt. James Corrigan, the treasurer, Capt. George P. McKay requested that his books be audited before the annual meeting, Capt. William S. Mack and Capt. C. E. Benham were appointed a committee to do the work. Masters of boats trading to Lake Superior complain that during the past season they were unable to hear the fog whistle at White Fish Point when any distance from it. It is said that the boiler at the station is too small to supply enough steam to work the whistle properly. The matter was referred to the committee on aids to navigation and will be taken up at the annual meeting. Another meeting of the finance committee will probably be held before the annual meeting of the association on January 8, at Detroit.

A new fireboat has been put to work at this port after the local inspectors of steamboats had ruled upon her equipment. The fire boats come under the rules governing tugs and similar sized craft and the inspectors here are too well advised and prompt enough in their inspections to let any class of steam tonnage evade the strict letter of the law, whether owned by the municipality or by private firms.

FAIRPORT, OHIO.

Special Correspondence to The Marine Record.

The only steamers laid up at this port are John Harper and Alex Nimick.

BUFFALO, N. Y.

Special Correspondence to The Marine Record.

Owing to the removal of aids to navigation the latest of the fleet were ordered to sail through the Straits of Mackinac and the rivers only during daylight. By taking this precaution no casualties occurred, but there has been about the usual amount of complaint on account of the lights, buoys, etc., being removed before everything had got safely into winter quarters.

It is simply useless to kick against the action of the light-house department in recommending the removal of the supply depot from this port to Erie, in fact, there can be no doubt but that the latter port is the most convenient one for the 10th district to have headquarters at. The talk about taking away a certain amount of trade from Buffalo on account of the removal is not right either because the supplies are all bought from regular government contractors after proposals for bids have been duly advertised for and then the several districts are supplied according to their annual requisition list.

Capt. Cowan, of the steamer John Mitchell, has been highly spoken of all around this week for bringing his steamer down from Chicago on a draft of nearly 16½ feet on the last trip of the season. She touched lightly at Grosse Point, but came along all right while vessels of lighter draft anchored over night in Lake St. Clair. Capt. Cowan showed excellent judgment and skill in being able to pick out the veins of deepest water through the rivers and on to Lake Erie at a time when a generally low stage prevails.

LORAIN, OHIO.

Special Correspondence to The Marine Record.

The following vessels are in winter quarters here: Steamers Vega, Vulcan, Robert Wallace, and schooners J. B. Kitchen, Alice Norris, Smith & Post and Maumee Valley.

ALPENA, MICH.

Special Correspondence to The Marine Record.

There is no port on the chain of lakes where the members of the life saving stations are held in higher repute than they are at Alpena. With the close of the season it has now become customary for the best citizens to tender the several crews in this vicinity a farewell dance and banquet, and the same took place last Thursday night with all due eclat. Between the residents or citizens and the life savers there is a bond of mutual respect and esteem, so that it is not to be wondered at that one hundred and fifty of the most prominent people of Alpena attended the reception given in honor of the brave life savers. Among the stations and crews represented were Middle Island, Thunder Bay, Tawas, Sturgeon Point, Hammond's Bay on Lake Huron, and Portage Canal, Lake Superior. The day after the banquet a card of thanks was published as follows: "The captains and crews of the life-saving stations who were so kindly remembered and so hospitably entertained by the citizens of Alpena last evening, wish to return their most hearty thanks for all the many kindnesses shown them in the past, and will endeavor to show by both word and act in the future that the whole-heartedness of Alpena's most royal citizens will ever be remembered, and that we can now only await an opportunity to return compliments. Capt. John Persons, Thunder Bay; Capt. D. McKenzie, Middle Island, and members of the several crews."

The past season was a particularly busy one for the crew of the Middle Island life saving station and they did some excellent work, the record being as follows:

May 8 to 9, assisted schooner American Union, of Chicago, light, twenty-two miles from the Island. A crew of nine, vessel valued at $10,000.

May 17, schooner Ishpeming, value $8,000, cargo of pig iron, crew of eight took one ashore, cargo valued at $11,000.

May 19, took fourteen men from shore to assist men working on American Union.

Steamer J. D. Marshall, of Chicago, valued at $40,000, cargo valued at $13,000, stranded at Turnbull's dock. Crew of twelve, three men taken ashore.

Schooner Granger, of Chicago, valued at $50,000, cargo valued at $3,500. Crew of seven, stranded at Turnbull's dock, assisted.

Schooner Muskoka, of Toronto, Can., valued at $10,000, cargo $20,000. Crew of nine, twenty men taken to and from shore, assisted.

July 4, fish boat at False Presque Isle capsized and two men drowned. Seventh and ninth assistance rendered.

August 1, assisted steamer Wanika, of Saginaw, valued at $8,000, took ten people ashore in heavy storm during the night out of a crew of twelve.

August 2, assisted schooner Dacotah, of Detroit, valued at $2,000, cargo valued at $1,500, crew of seven.

October 14, assisted schooner Southampton, of Kingston, Can., valued at $1,000, value of cargo, $500. Crew of eight.

November 11, assisted schooner John Martin, of Cleveland, valued at $23,000, cargo $12,600. Crew of eight.

November 11, assisted schooner Delta, of Marquette, valued at $12,000, cargo $10,000. Crew of seven.

November 27, assisted steamer Servia, of Cleveland, stranded, value of vessel, $125,000, cargo, $13,000. Crew of 14, one taken aboard life boat.

Twenty-six men who were rescued were in great danger and the chances are would have lost their lives if assistance had not been at hand; forty were taken ashore, and many were transferred to other craft. The number of people on boats assisted was 105, and the value of vessels amounted to $244,125, while cargoes were valued at $85,700.

MARITIME LAW.

ALEXANDER & AL. v. CAR FLOATS NOS. 1, 3, 4, & 5.

U. S. District Court, Southern District of New York.

SALVAGE—FIRE ON BULKHEAD—TOWING VESSELS INTO STREAM.—Four car floats, ladened with rail road cars containing merchandise were lying in a slip on the East River when fire broke out on the bulkhead near by. A number of tugs came to their assistance and towed them into the stream, pumping upon such fire as had taken hold of one of the floats. There was much danger to the tugs; the service lasted not more than an hour or two; the danger of some of the floats was great, and it was advisable that she should be removed from the slip on the breaking out of the fire. The floats, the cars and their contents were worth about $39,000. Held that $2,000 was a suitable amount for the whole service, which sum was divided among the tugs in the order of merit of the services rendered by them.

Brown, J.

The above are salvage claims by the owners of twelve different tugs, for services rendered in the afternoon of May 9. 1894, in hauling from the between Piers 32 and 33, East River, car floats 1, 3, 4, and 5, and putting out fire in Float No. 3.

A destructive fire broke out near the bulkhead between Piers 33 and 34. Six tugs were more or less engaged in hauling No. 3 out of the slip and putting out the fire. The other tugs were engaged in hauling out and taking care of the other three floats. The value of the floats with cars and merchandise, was about $39.000. The excessive number of tugs present, ready and able to perform the necessary service, does not increase the amount to be awarded altogether, but rather diminishes it as showing the abundance and ready means of relief.

Taking all the circumstances into account, I think $2,000 will be a suitable award for this whole service, which will be apportioned according to the special facts relating to each float and the tugs assisting.

The Lee, was a small tug. She had no fire pump. Upon conflicting evidence, I am constrained to find that she rendered no beneficial service, having left the scene before the float was pulled out of the slip, and away from the burning shed enough to be of any use. The other five tugs all rendering some assistance to No. 3 and all played upon the fire, except the Sparks, which, though first on the ground after the Lee, had no fire pump. Her work was pulling alone, sufficient to move the float, so that her priority was of little value. The Rambler went along the upper side of No. 3, and commenced pulling and playing her pump, as soon as the float had been hauled out in the stream by the Sparks and the Charm, far enough to admit of her going alongside No. 3 ahead of the Charm. The Roy and the Nellie came along the lower side of No. 3, and pumped about the time that the float had got hauled out of the slip. There was but little fire on the float itself, or on the outside of the cars, and it was quickly extinguished, except where it had penetrated inside of the second car. Besides playing inside through the doorway, a hole was cut nearer to the end, through which streams were poured. The Charm alone, or at least with either one of the other boats having a pump, was sufficient to put out the fire. But the others assisted in the work and although not absolutely necessary, their services were accepted by the persons in charge of the floats.

The Charm being the first on the ground with a pump, is entitled to the largest award, both for first pumping, and for the first effectual hauling out in conjunction with the Sparks, a smaller tug. There was no danger from the fire to any of the tugs, and it was not over two or three hours before the boats were again returning to the slip. The services to Float No. 3 was essential to her safety. Except for the speedy presence of tugs able to remove her from the slip and to put out the fire at once, she must have been destroyed or very greatly damaged, besides injuring the adjacent floats. Float No. 3, and the ten cars with the merchandise on board, were worth about $10,000. The immediate removal of the float from the slip was of prime importance, and was accomplished practically by the Charm and the Sparks alone. For the service of No. 3 I allow $1,250, divided among the tugs as follows: To the Charm, $600; Sparks, $150; Rambler $175; Roy, $175; Nellie, $150.

Alongside No. 3 was float No. 4 with ten cars on board, worth altogether $10,000. Next below No. 4 was No. 1, a small float, worth, with cars and contents about $5,700. Next below and alongside of Pier No. 32, was Float No. 5, which with cars and contents was worth about $13,000. None of these three floats were touched by the fire They were, however, in some danger. The wind at the beginning of the fire was towards these floats, though it soon after changed, so as to carry the fire away from them. As it turned out, probably Nos. 1 and 5 would not have suffered had they remained in the slip. The city fire boats, which soon appeared, though largely occupied with other parts of the fire, would probably have been able to prevent damage to them from the burning shed 50 feet away. It was probably necessary to remove No. 4, both to avoid the fire, and to permit the fire boats to work in the slip. At the time when all three were removed, however, it could not be foreseen how extensive or destructive the fire would become; and reasonable prudence demanded the removal of all the floats from the slip; and the persons in charge of the floats deemed it necessary and desired their removal. The services to all were accepted, and should, therefore, be treated as a salvage service, though of a grade inferior to that rendered to No. 3. The John Twan, 50, Fed., 457.

Float No. 4 was next to No. 3 in the most apparent danger, and required removal. The tugs Indian, Atwood and Runyon towed her from the slip and back again after a couple of hours, for which I allow $450, viz., $150 to each tug.

The other two floats No. 1 and 5, being in much less danger, $300, will, I think, be a sufficient allowance for the services to both. They were removed by three tugs, the America, the Adelaide, and the Harry Hohne. To the two first I allow $120 each; to the Hohne, $60, a less amount, as marking my condemnation of the long continued and needless playing of her hose pump, as a sham exhibition of work.

Of the amounts above awarded, two-fifths will go to the officers and crew of each tug in proportion to their wages, and three-fifths to their owners, with costs; except as respects the Hohne, whose owners should receive three-fourths, and the officers and crew one-fourth, with costs.

LAKE ERIE-OHIO RIVER CANAL.

Relative to the commission of board of engineers of the army authorized to survey the best route for a Lake Erie-Ohio River canal, Gen. O. M. Poe says: "The requirements of the river and harbor act of August 17, 1894, providing for surveys for a continuous canal connecting the waters of Lake Erie with the Ohio River through the state of Ohio, are so extensive and important that it is impossible, in my opinion, to fully conform therewith in time to report to the present session of Congress, as specified by the act. Unless the time be extended within which the report is to be submitted, the report will necessarily be restricted to a general consideration of the subject, and can not be accompanied by all the detailed information contemplated by the act. The two main routes named in the act have an aggregate length of 569 miles, and when to this be added the branches and river and stream channels, also included in the act, it will be seen that the aggregate must approximate 1,000 miles. The mere mention of the fact is sufficient to indicate the impracticability of going into any detail in a report to be submitted within the next three months, even if the appropriation therefor were adequate, which it certainly is not." The time has therefore been extended by the present Congress at the instance of the chief of engineers, U. S. Army.

BOUNDARY OR DIVIDING LINE AT THE WESTERN END OF LAKE ERIE.

Another complication seems likely to arise relative to the boundary or dividing line between United States and Canadian territory at the western end of Lake Erie.

The recent destruction of the nets of American fishermen by the Canadian fishery protection cutter Petrel has caused an investigation to be made by the revenue marine service in behalf of the state department into the circumstances under which the Canadian officials destroyed the nets which belonged to American fishermen following their occupation in the waters between Pelee Island and Kelley's Island. The state department has discovered from a careful examination of all the treaties and maps bearing on the subject, that there is no definite boundary line between the United States and Canada in this portion of Lake Erie, and that therefore there is no accurate basis for a contention regarding the rights of Americans to fish in these waters.

The Canadian cutter Petrel several weeks ago descended upon some American fishermen between Kelley's Island and Pelee Island and cut their nets from the buoys, making this valuable part of the equipment a total loss. A protest was at once telegraphed to the state department from Sandusky, Ohio. The matter was referred to the treasury department and thence to the revenue marine with a request for a prompt and thorough investigation and the revenue cutter Fessenden stationed on the lakes was dispatched to the scene and spent some time in investigating the incident.

It is the preliminary report from the Fessenden's commander that puzzles the state department officials and has brought the controversy to a standstill. It is ascertained that the commander of the Fessenden, although able to determine accurately the location of the nets when they were cut, is not able to settle whether they were at that time in American or Canadian waters. An examination of the treaties and accompanying maps at the state department fails to shed any light upon the question.

By the treaty of Ghent a commission was authorized to define the exact location of the boundary line extending through the Great Lakes, and their report as rendered was accompanied by numerous charts, defining the points of departure, courses, etc., of these lines, but a careful examination of the map at the western end of Lake Erie discloses the fact that it was not properly triangulated and does not admit of its being used as the basis for an accurate survey. The courses given in the commissioner's report are inadequate and do not agree with the data of the charts. A map made in 1835, under the supervision of the war department, has also been examined, but is found to be no more accurate than the treaty charts.

THE HEAD OF THE LAKES.

The steamer Globe cleared from the head of the lakes on December 5, the latest clearance on record, although the lake has been open and vessels might have cleared at even a later date in any previous year if cargoes could have been insured.

The season opened at Superior and Duluth with the arrival of the steamer Centurion, April 20. There were 230 days of navigation this year against 206 for the season of 1893. Last year the first boat to reach the head of the lakes was the George W. Roby, on May 9, and the last departure of that season was the Kittie M. Forbes, on December 1.

The total receipts and shipments at the port of Superior, reported officially, were 2,139,574 tons against 2,005,507 tons for the preceding year of 1893, an increase of 134,067 tons, or about 45 cargoes of 3,000 tons each. The total receipts were 1,419,534 tons, and the shipments 720,040 tons. Coal receipts were 1,142,614 tons; flour shipments, 3,077,038 barrels; wheat shipments, 10,737,000 bushels; coarse grain, 820,000 bushels; lumber shipped, 24,569,000 feet. In the matter of receipts Superior distances Duluth by 302,732 tons. Duluth's iron ore amounted to more than the entire shipments of that port last year. The total of all commercial transactions at the head of the lake for 1894, is 6,180,472 tons against 5,223,075 tons for the season of 1893, a general increase for the ports of Superior and Duluth of 957,397 tons.

Rates of freights on coal ranged from 30 to 50 cents per ton for bituminous and 20 to 30 cents for anthracite, about two million tons being received, or one hundred thousand tons less than last year in the proportion of about 50,000 tons of hard and 1,500,000 tons of soft coal, not including about 350,000 tons on the docks when navigation opened. Coal receipts at Duluth and Two Harbors for November alone amounted to 121,356 tons. Next June the coal dock at old Superior, which the Youghiogheny & Lehigh Co. leases from the Northern Pacific railroad will be taken back by the railroad and used for a merchandise dock. As a result of the big dock improvements put in by the Northwestern Co., at Allouez Bay, Superior, the Omaha railway has just put in a large number of side tracks, where most of its freight trains will be made up.

THE well known Oswego ship chandler, John S. Parsons, is not by any means discounted on his choice of the many marine scenes depicted on this year's calendars, as the subject of the engraving issued on his well-printed cardboard "Day Reckoner" shows a "captainess" in charming yachting costume, with glasses in her hand, "on board the German Emperor's yacht Hohenzollern watching the English races."

ALUMINUM FOR BOAT BUILDING.

Leaving out of consideration the cost of construction, it may at last be said that the superiority of aluminum over steel in some branches of marine architecture has now been satisfactorily demonstrated. For this fact the world is indebted to the enterprise and liberality of the French Government, although in the actual execution of the matter the credit belongs to a firm of English engineers and shipbuilders. The occasion on which the merits of the new metal were put to a practical test was the recent building of an aluminum torpedo boat of the second class for the French navy by Messrs. Yarrow & Co., of London. This boat is 16 per cent. lighter and 3½ knots faster than torpedo boats of her class in the British navy. The French Government has experimented diligently with all forms of aluminum and has, by its example, and doubtless by other means of encouragement, induced private firms to experiment along commercial lines.

The manufacture of aluminum boats for the use of exploring expeditions in Africa has become an established business in France. It is by far the best metal for the construction of explorers' boats, which have to be carried in parts by negro porters. Whether or not it is equally suitable for the purposes of Arctic exploration remains to be tested.

The French were not only quick to recognize the value of aluminum for explorers' boats, but they were almost equally alive to its adaptability to the purpose of yacht building. During the past yachting season a French sailing yacht built of aluminum justified the enterprise of its owners by beating everything of her tonnage in the French regattas, but she was not sufficiently up to date in design of hull to cope successfully with the best English craft. It may also be noted that an aluminum steam launch was an interesting feature of the Henley regatta on the Thames last July.

Apart from the present cost of aluminum, the only objection to its general use in seagoing vessels is its tendency to corrode when exposed to salt water. Were it possible to use the metal in a pure state there would be no corrosion, but without alloy aluminum is too soft and brittle for the purpose of boat building. It is necessary therefore, to mix with it about six per cent. of copper or some such metal, which adds greatly to its weight, but at the same time gives it the required tensile strength. When the perfect alloy for aluminum shall be found it will be practicable to use the metal in salt water.

It must be conceded, however, that the Yarrows have taken a long step towards making the new metal salt water proof. What alloy they use is probably their own secret, although they say that it is merely six per cent. of copper. Whatever the alloy may be, it was decided upon after consultation with the French naval experts. If, as the Yarrows say, this new boat can remain in salt water uncovered by paint or varnish for a very long time without deterioration going on, it is certainly a very decided advance over forms of aluminum heretofore used, as boat owners who have tried aluminum rudders have found the process of corrosion to be very rapid indeed.

In the case of the Yarrow torpedo boat, however, the corrosion amounted to nothing more than a slight frosting, which would go to show either that the Yarrows had found a decidedly superior alloy or that in a boat built almost exclusively of aluminum the corrosion would be very much less than in cases where other metals entered largely into the construction.

When finished this vessel weighed 9½ tons, with water for the boiler aboard, thus showing a saving of 2½ tons over corresponding craft of the same dimensions in the British navy. On her trial trip she carried three tons weight, and in a continuous run of two hours averaged a speed of 20.558 knots an hour. The maximum speed was 22.222 knots. Vessels in the British navy of the same class and dimensions, under the same conditions of trial, have a speed of 17 knots. It will be seen, therefore, that the use of aluminum in this boat has resulted in a decrease of 2½ tons in weight and an increase in speed of 3½ knots per hour. The boat is 60 feet long and 9 feet, 3 inches beam.

As to the practical results of the use of aluminum in marine architecture, the Messrs. Yarrow say: "From the result obtained by this little vessel, the importance of the present departure in construction cannot be overestimated, and as soon as the time arrives when aluminum (which is distributed throughout the earth in such large quantities) can be supplied at a moderate cost, its extensive use for naval purposes, where lightness is of such importance, can no longer remain open to question, and the present application may be looked upon as a decided advance in naval architecture."

SALVAGE SERVICES.

The owners of the steamer City of Venice—Edward Smith and others, of Buffalo, and the Messrs. McGraw, of Bay City, have filed a libel against the steel steamer Spokane to recover a towing and salvage claim of $15,000. Last week the Spokane, while downward bound with a general cargo, became totally disabled, the libel avers, off Big Point Sable, Lake Michigan, through the breaking of her shaft. It had been arranged prior to leaving Chicago that the steamer John Mitchell should remain in company during the passage down the lakes, but the steamers lost sight of each other, and when the Spokane's shaft broke she was left helpless in a large measure. The City of Venice took her in tow for Milwaukee, which point was reached with the disabled craft at the end of about twenty-six hours' towing. The claim upon which the libel is based is chiefly for salvage. The cargo of the Spokane is valued at $225,000, The matter will probably have to be settled in the courts. Capt. Thomas Wilson, managing owner of the Spokane, promptly arranged a bond for the release of the steamer and repairs were completed at Milwaukee. In addition to the broken shafting, it was found that she required some new brasses, and new driving bearing casting

AN INTERNRTIONAL WATERWAY TO THE COAST.

Senator Vilat has offered an amendment to the sundry civil bill authorizing the President of the United States to appoint immediately after the passage of the act three persons who shall have power to meet and confer with any similar committee which may be appointed by the Government of Great Britain or the Dominion of Canada, and who shall make inquiry and report whether it is feasible to build such a canal as shall enable vessels engaged in ocean commerce to pass to and fro between the Great Lakes and the Atlantic with an adequate controllable supply of water for continual use, and where such canals can be most conveniently located, the probable cost of same and estimates and detail, and if any part of same shall be built in the territory of Canada, what regulations or treaty arrangements will be necessary between the United States and Great Britain to preserve the free use of such canal to the people of this country, with all the necessary facts relating to the construction and future use of deep water channels between the Great Lakes and the Atlantic Ocean.

The members of the committee shall serve without compensation, and $10,000, or so much as may be necessary, is appropriated for their actual traveling and other necessary expenses.

SEASON TRAFFIC—ST. MARY'S FALLS CANAL.

The average value per ton of freight this year has been placed at $10.85. The unit of values being amended from those adopted in 1885 and 1892.

The basis of unit values for the valuation of freight for this year has been entirely amended to suit current prices. Owing to the large depreciation of values, the changes are such that it makes the freight value appear less this year than last, notwithstanding that the freight is much in excess of that of last year. The amount of the difference caused by this depreciation in the values of the freights this year is two per cent. of last year's valuation, which was based on values adopted in 1885 and 1892. The freight traffic this year shows an increase of 22 per cent. over last season, and the registered tonnage an increase of 34 per cent. The falling off in coal shipments is due to the fact that no coal shipments were made early in the season on account of differences between vessel owners and coal dealers as to the freight rates.

The locking facilities will be one and one-half times greater next year. In the year following the facilities will be increased three and one-half times more. This will give a five-fold increase in the locking capacity within the next two years, so that even if the increase in traffic should prove permanent, it does not seem that any increased facilities in the capacity of the lock, other than the improvements now under way, will be required, at least for several years.

ANOTHER DASH AFTER THE PEWABIC.

There is something out of the ordinary practice of commercial pursuits in the desire to obtain wealth through the discovery of hidden treasure or even what is thought to be such. Men will go to greater lengths in an attempt to secure treasure trove than they would in what might be termed more legitimate enterprises.

As for instance, in the case of the sunken steamer Pewabic, supposed to contain a quantity of copper as part cargo. It is reported that another company has been formed to seek the lost cargo of the steamer, which was sunk in Lake Huron, through collision just thirty years ago, and in attempting to recover the most valuable portion of her cargo three lives have already been sacrificed. The hull lies in about twenty fathoms off Thunder Bay, Lake Huron, and is erroneously supposed to contain 500 tons of pure copper and coined gold to the amount of $300,000 or $500,000. The company to search for the contents of the hull is said to be formed by Minneapolis, Detroit' Duluth and Chicago capitalists. This work will be done under patents for subaqueous travel owned by a resident of Harrisburg, Pa., and next season the attempt to get the tresure will be made.

Twenty years after the collision which sank the Pewabic, an attempt was made to locate the vessel and get her cargo. Appliances for deep sea diving were crude then, and two men lost their lives. After this nothing was done until 1892, when the small steamer Emerald was fitted out with all the latest appliances for diving, and the diver, Oliver Pelkey, who had made some reputation for deep-water work, was engaged to go down. The Emerald used her drags for two weeks before the wreck was located. Then Pelkey went down and entered the wreck. His first trip was a success, but the next time he lost his life, and the undertaking was then abandoned. Late last summer another expedition was fitted out, and the wreck was once more found by drags, and buoyed. In the meantime a syndicate was formed, and a diver of long experience was offered large pay to make the attempt. The syndicate offered to insure his life for $15,000, to pay him $2,000 before he made the descent, and to give him half the net proceeds of the venture. The submarine worker, however, refused all offers, as he said he did not want to be the fourth to die in the Pewabic. Then came a Harrisburg diver, and his offer was accepted. The report now runs that he will use besides a special armor a system of air bags for lifting the vessel and cargo. and he will make the attempt early next spring

THE WESTERN OCEAN WONDER.

Capt. Adolph Frietsche, who sailed a flat bottomed schooner rigged skiff single-handed from Milwaukee, Wis., across the Atlantic, has now reached Manchester, where his intrepidity and skill is more likely to be recognized than at any other port of call which he has made during his eventful cruise. Writing to a friend at Cleveland, Frietsche has the foilowing to say:

BIRKENHEAD, ENG , Nov. 20, 1894.

JOHN JASTER, ESQ , Cleveland.

Dear Sir: Since you last heard from me I proceeded from Cork to Dublin, remaining there for several weeks. There was interest enough, people crowding by the thousands on the quays wherever I came, and giving me the title of a "wonderful man," and expressing their sympathy, but I could not get my boat on exhibition, and this was a serious drawback to me, and in Ireland I realized nothing.

About a week ago I left Dublin for Liverpool, made application to the dock board for a berth in George's dock in order to exhibit her there, and after wasting some time waiting for their decision, was refused. In the meantime she had been sized up by thousands, although I was lying in an out-of-the-way place.

It appears to me as if there existed a prejudice against the stars and stripes here. Everything seemed to work contrary, and I am thoroughly disgusted. If I do not meet with better success in Manchester I am seriously thinking of sailing back to the States single-handed, although I am afraid the people would consider it very foolhardy, as I have the best record so far as sailing and navigating is concerned, and also proved the superior seaworthiness of the American flat bottom boat by crossing with the "Nina" open aft, as will be remembered by all who visited me in Cleveland. She had an open space aft 6x5 feet, which I never closed up during the trip.

I have an idea of taking the Nina back to her birthplace, Milwaukee, and disposing of her there. As far as myself is concerned I would be glad to accept a position as master of a good American craft, being tired of traveling around as a curiosity. My address will be Manchester, where I am going next week.

Yours, very truly,

ADOLPH FRIETSCHE.

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CLEVELAND, O., DECEMBER 20, 1894.

THE Agricultural Department has published a carefully prepared estimate of the timber in the Pacific Northwest, From this it appears that there are 25,000,000 acres of timber lands, averaging 20,000 feet, board measure, to the acre. With an allowance of 20 per cent. for bad land, it shows an available aggregate of 400,000,000,000 feet of lumber. The stumpage is now worth from 75 cents to $1.50 a thousand, and the freight from Puget Sound to New York or Liverpool is from $10 to $12 a thousand.

SHIPMASTERS spending the winter in Chicago or Cleveland could not do better than visit occasionally the branch hydrographic offices established at those ports. The naval officers in charge are men of practical experience, ever ready to give professional aid and to sympathize with members of the fraternity in their efforts to acquire a higher knowledge of their business. As a suggestion to the Shipmasters' Association at the above ports, it might not be found entirely distasteful if the officers in charge of the branch hydrographic offices should be invited to give a few brief addresses throughout the wlnter at the rooms of the association, then all hands could take aboard whatever might be imparted

IN past seasons the close of navigation has been ordered and made by the lake underwriters and not according to the state of the weather or the lack of cargoes. With the advent of high-classed, powerful steel and wooden steamers this custom is gradually falling into disuse and the more enterprising underwriting firms show that they are willing to follow the spirit of the times by accepting risks from the best known and reliable vessel owners as long as the weather remains steady and the lakes are clear of ice. It is seldom that charters have been placed as late as December 19, yet two Cleveland steamers were chartered on Wednesday for corn Toledo to Buffalo at 2 cents, and other charters will be made still later in the week. There is an easy million dollar's worth of floatiug property now at work on Lake Erie and so far as human foresight can guess they are likely to be at it until the end of the month.

LAKE SHIPBUILDING.

The contract for two steel tank barges for the Standard Oil Co., New York, on which shipbuilders were asked to figure last week has been awarded to the American Steel Barge Co., West Superior, Wis. On second thought several firms refused to put in bids for the contract assuming that as John D. Rockefeller was interested in the Wisconsin shipyard they would only be making figures for that yard by submitting proposals.

This feature of drawing up plans, specifications and amounts for others to follow is one of the measures which will have to be closely watched in the future. It is quite correct to hold that competition is the life of trade, but the competition should at all times be square honorable and above board and to this end the system in force on all government contracts would be of the greatest possible advantage in commercial circles where a batch of proposals for the completion of important contracts had to be submitted to interested parties. We are not leaning in any individual sense to one firm of shipbuilders more than another in thus advocating the public opening of bids, for even under such a rule it would not be possible to shut out chicanery in bidding for work where the intent was at variance with what might be termed square dealing. Of course an intending builder is at liberty to place his order at any time or place he may see fit. Yet, when the attention of a number of firms is directed to the work on the assumption that all things being equal the contract will be awarded to the lowest bidder, although not necessarily accepting any of the bids asked for, as a qualification, it does look as if a public opening of the proposals would be the most honorable method all round.

After the foregoing digression we are pleased to note that during the week another contract for new tonnage has entered the preliminary stages. This time it is for two steel tow barges of three to four thousand tons capacity, or one of each, to be built to the order of the Cleveland-Cliffs Iron Co. already the owners of a fine fleet of modern steel tonnage. We speak advisedly in saying that such a contract is yet in its preliminary stages, for although it has been talked over by the principals for a few days there is as yet nothing definite determined upon any more than there has been for the 425 feet steel steamers for the Minnosota Steamship Co. of Cleveland.

THE RECORD has for the past few years consistently advocated the building of iron and steel towbarges or consorts, and this winter will see the fruition of our views in this direction, partly helped out no doubt by the success of the metal barges constructed on the whaleback type by the American Steel Barge Co. As a further departure from former construction we have pointed out that vessels exclusively in the ore trade should be fitted with wooden platforms running within ten to twenty feet of the ends and raised several feet from the top of the water bottoms, our ideas in this connection are borne out by recent specifications for new tonnage requiring six feet water bottoms instead of the former custom of about half that depth. Increased carrying capacity can not be obtained without greater length, and the latter is impossible without increased depth unless heavy bulk cargo is carried up from the bottom of the vessel, indeed, the wonder is that the large vessels of three hundred feet and over have not shown more signs of punishment along their upper works from the fact of their carrying ore cargoes so low down in the body of the structure, but the comparatively steady weather during the summer months and the short time the cargoes are in the hull accounts in a great measure for the excellent condition in which the large hulls are now found although the best firms are more than ever anxious to have thorough and skillful surveys made of their fleets so that the first or slightest signs of distress may be attended to in time and the boats kept up to the highest point of strength and general efficiency for the trade in which they are engaged.

RAFT TOWING ON THE LAKES.

The bill introduced by Congressman Lockwood, of Buffalo, for the regulation of raft towing on the lakes, provides that what is known as bag or sack rafting shall be permitted in the open lakes, but that every vessel having a raft in tow shall carry at night two white lights showing all around the horizon and not less than eight feet apart and twenty feet above the raft. Each towing vessel is also to carry modoc or screeching whistles. It is also provided that in channels, harbors, or where passage between piers or alongside revetted banks is necessary the rafts shall be so constructed that the boom logs surrounding the rafts shall overlap each other at least three feet and be so fastened that the laps cannot straighten out. In and through the connecting waters of the Great Lakes sack rafting is to be prohibited, and all raft towing is prohibited in the St. Clair flats channel and Hay Lake channel. On St. Mary's River between the Soo and Mud Lakes, rafts shall not exceed sixty feet wide and 600 feet long, and each be handled by two tugs. On Detroit and St. Clair Rivers rafts shall not be more than 100 by 1,200 feet. Fines are established for violating the law ranging from $100 to $1,000.

The foregoing provisions seem to be equitable and yet it is a foregone conclusion that the bill will be strongly opposed by the interests engaged in rafting timber on the lakes, in fact, a prominent lumber king has already stated in substance that they were able to kill the former bill and Lockwood's measure will go the same way. Putting all feelings of commercial antagonism aside and advocating solely what is for the best interests of the greatest number, it would then be candidly admitted that proper restrictions for raft towing are not only desirable, but indispensable in carrying on the commerce of the West and the Northwest. Therefore the spirit of opposition engendered between the lumber interests and vessel owners ought not to be kept alive, but, by meeting on common ground, with the desire to conserve the best interests of all concerned, legislative measures could be mutually endorsed which would settle the entire question of restrictions on raft towing for years to come.

MID-WINTER NAVIGATION.

The Bradley Line steamers Hesper, City of Cleveland and Maurice B. Grover are running between Toledo and Buffalo. The Wilson Transit Line steamers Spokane, Missoula and Yakima, as well as the staunch wooden steamer Aurora, of the Corrigan fleet, and the City of Glasgow and William Chisholm are all still at work and from present indications likely to be kept at it.

All of the foregoing powerful and well equipped modern freight steamers are in charge of men who thoroughly understand every phase of lake navigation, owned by men in whom the underwriters have every confidence, and until stopped by ice or the lack of commodities to transport, they are gilt-edged risks for even the most conservative underwriters to handle.

The canal schooner age has gone by and the day is near at hand when lake traffic will be carried on to a greater or less extent throughout the winter, except, perhaps, during an exceptionally severe season, when a discontinuance for a few days or weeks may ensue. It is no longer necessary, as in former days, that insurance agents should be individually acquainted with each and every vessel on the lakes, her construction, ability, equipment, etc., as vessels now built under special survey, classed and rated by universally known classification societies furnish the underwriter even at the remotest ends of the earth with the necessary particulars for accepting or declining lake risks on hulls or cargoes, and they are never misled in their acceptances.

The valuable tonnage now built and building for the lake trade has attracted the attention of capitalists in the underwriting world and the home circle style of handling business or what is more expressive still, the provincialism held to in the past, is being wiped out, as it should be, for the lake marine is now a prominent factor in the industries of the nation, and its varied interests can no longer be kept within personal, narrow or circumscribed limits, especially from an underwriters' standpoint.

WOULD the completion of the Nicaragua canal benefit or detract from lake commerce? The Pacific trade, coast and ocean, centering at any point north of San Francisco, and more especially so at Puget Sound, has all along been considered tributary to the lakes in its transcontinental phase; therefore, any traffic which would be directed to the Central American waterway, would be at the expense of the lake and railroad traffic of the north. This from the present state of commerce would seem to be a fair view, and perhaps it is, but in the development of trade, traffic and intercourse which the opening of a canal route would bring about, the northern commerce would be increased at an earlier date and in a greater volume than if left to work along on its present lines and without the aid of a canal. A Central American canal would be to this continent what Suez is to Europe and Asia. Such a waterway is certain to be constructed sooner or later and the only question that seems to occur at the present time is, whether the United States is to assume jurisdiction over the contemplated grand artificial inter-ocean waterway at this stage of the proceedings or wait until the enhanced value of its stock would require the cost of a no insignificant national debt to procure

TO CONNECT A LIGHT-SHIP BY TELEPHONE.

The U. S. Light-house Board will in the near future test a telephone system between the Scotland Lightship anchored in New York Bay and the Sandy Hook station. This is said to be an undesirable test on account of the proximity of the ship to the shore, and also because the cable is in the direct path of vessels. The Sandy Hook Lightship has been suggested as a more desirable point from which to establish a telephone system, laying the cable to the shore about the vicinity of Rockaway Beach.

THE NICARAGUA CANAL.

Senator Dolph argued from almost every point of vantage in the senate this week in favor of the government issuing bonds for the completion of the Nicaragua canal. The senator submitted the following table of distances which would be saved by going through the Nicaragua canal:

From	Via Cape Horn.	Via. Cape of Good Hope.	Via. Nicaragua Canal,	Distance saved.
	MILES.	MILES.	MILES.	MILES.
New York to				
San Francisco.....	14,840	.....	4,946	9,894
Bering Strait.....	17,921	.....	8,026	9,895
Sitka.....	16,105	.....	6,209	9,896
Acapulca	13,071	.....	3,122	9,949
Mazatlan	13,631	.....	3,682	9,949
Hongkong.....	18,180	15,201	11,938	4,163
Yokohama.....	17,679	16,190	9,363	6,827
Melbourne..... ...	13,502	13,290	10,000	3,290
New Zealand.....	12,550	14,125	8,680	3,870
Sandwich Islands..	14,230	.....	6,388	7,842
Calloa..... ...	10,689	.....	3,701	6,988
Guyaquil.....	11,471	.....	3,053	8,418
Valparaiso.....	9,750	.....	4,688	5,062
New Orleans to				
San Francisco.....	15,052	.....	4,047	11,005
Acapulco	13,283	.....	2,409	10,874
Mazatlan.....	13,843	.....	2,969	10,874
Guyaquil.....	11,683	.....	2,340	9,343
Callao	10,901	.....	2,988	7,913
Valparaiso.....	9,962	.....	3,987	5,975
Liverpool to				
San Francisco.....	14,690	.....	7,694	6,996
Acapulco	12,921	.....	5,870	7,051
Mazatlan	13,481	.....	6,430	7,051
Melbourne.....	13,352	13,140	12,748	392
New Zealand	12,400	13,975	11,349	1,051
Hongkong.....	18,030	15,051	13,786	1,265
Yokohama	17,529	16,040	12,111	3,929
Guyaquil	11,321	.....	5,890	5,431
Callao	10,539	.....	6,449	4,090
Valparaiso.....	9,600	.....	7,436	2,144
Sandwich Islands..	14,080	.....	9,136	4,944
Spain to Manila	16,900	13,951	13,520	431
France to Tonquin... .	17,750	15,201	13,887	1,314
Hamburg to				
Mazatlan	13,931	.....	6,880	7,051
Acapulco	13,371	.....	6,320	7,051
Fonseca	11,430	.....	5,530	5,900
Punta Arenas, Costa Rica.....	11,120	.....	5,515	5,605

From	To eastern entrance Nicaragua Canal.	From	To west'rn entrance Nicaragua Canal.
	MILES.		MILES.
New York.....	2,021	San Francisco	2,776
Liverpool	4,769	Valparaiso	2,518
Hamburg	5,219	Callao.....	1,531
Amsterdam	4,994	Portland	3,219
Havre	4,874	Victoria.....	3,428
Cadiz.....	4,220		
New Orleans...	1,308		

NOTE.—The distances are measured by customary routes most convenient for sailing ships and slow freight steamers.

It will be seen that the canal would lessen the distance between New York and San Francisco 9,874 miles; between Liverpool and San Francisco 6,996 miles, and the distance saved between Liverpool and New York and Portland, or the mouth of the Columbia River and Puget Sound would be about the same.

OBITUARY.

CAPT. ORRIS IRONS.

One by one the men who first engaged in developing lake commerce are passing away, and the former methods of transportation, as well as the class of tonnage used, will soon become matters of history.

Capt. Orris Irons, who died at his home in Pentwater, Mich., November 25, was born in the town of Mexico, N. Y., in 1830. In 1840 he moved with his parents to Grand Haven, Mich., and in 1858 to Pentwater, Mich. Capt. Irons commenced sailing when a mere boy and at the early age of eighteen was master of a vessel. In the early sixties Capt. Irons started in the towing business at east shore ports and continued in that line of work up till three or four years ago. During his long and eventful career on Lake Michigan he gained and held the esteem of all those with whom he was brought into contact, and many will be pained to learn that their old time shipmate, friend and associate has been summoned to "cross the river." Capt. Irons leaves a widow and son who reside at Pentwater; also a father who is without doubt one of the three or four pioneer lake navigators now living. The senior, Capt. Eddy Irons, was master of a vessel in the upper lake trade in the late "twenties," nearly seventy years ago, a record which but few now living enjoy.

A HOLLAND TYPE TORPEDO BOAT.

The board of naval bureau chiefs has practically completed the plans for a submarine torpedo boat of the Holland type. The construction bureau has been engaged in gathering data to show what the thickness of the shell of the craft should be to resist the explosive effect of the torpedo discharged at short range. In this connection recourse was had to the old Lay torpedo shell, which was used in the Newport experiments about a year ago. It was found that the shell bore the force of the explosion very well until the range was brought within eighty feet from the torpedo, when it began to show signs of disruption, being severely battered.

As this shell is scarcely thicker than ordinary tin plate the constructors estimate that the shell of the submarine boat which must be half an inch thick to withstand the water pressure at considerable depths, will be amply strong enough to resist the explosion of a torpedo at very short range. These facts will be laid before Secretary Herbert, who is expected to thereupon issue the necessary orders for the building of the boat.

A NEW HAMBURG-AMERICAN STEAMER.

The new screw steamer Patria, of the Hamburg-American Line, built in the yards of the Vulcan Shipbuilding Co., at Stettin, Germany, made her trial trip on the 15th of November of this year. She is of the twin-screw type, and her engines developed on her trial 4,353 indicated horse-power, with which she obtained an average speed of a little over fourteen knots, with a maximum of 15.32 knots, while the contract called for only 13 knots.

The vessel is of the following dimensions, viz.: Length, 460 feet; beam, 52 feet; depth, 35 feet, and she is of 7,118 gross registered tonnage. The engines are of the triple compound system, three large double-ended boilers supplying the steam.

FOR FAST MAIL SERVICE.

Postmaster General Bissell and Supt. Brooks, of the Foreign Mail Service, have decided to provide necessary arrangements for securing to merchants in Chicago, St. Louis, Baltimore, Boston and Philadelphia, the cities authorized to make up pouches for foreign points, the advantage of forwarding foreign mail by the latest train that connects with the steamers at New York City. The plan will obviate the necessity of having this mail handled and way-billed at the New York postoffice and messengers in cases of very close connections, will meet the incoming trains at the depot and carry the mail direct to the steamers. The arrangement will take effect January 1st.

PORT HURON WINTER MOORINGS.

The following named steamers are here holding grain for the winter: Australasia, H. W. Sibley, Madagascar, Whitaker, Sauber, Columbia, John F. Eddy, B. W. Arnold, Newaygo, Gogebic, Monahanset, George Stone.

Other steamers wintering here: S. C. Baldwin, Porter Chamberlain, Jas. Adams and dredge, T. D. Stimpson, Brockway, Belle Cross, Cleveland, Colorado, L. S. Porter, C. H. Davis, Rhoda Stewart, Mineral Rock, Despatch, J. P. Clark, H. E. Runnels, Pawnee, Langell, Colwell, Kittie Forbes, Ed Jenks, Mary Groh, R. T. Roy, City of Concord, C. L. Boynton, M. F. Merrick, D. N. Runnels, Harley, Sprite, Kittie Haight, Conger, Jim Puller and dredge.

Sailing vessels: Wm. Young, Edwards, Geo. Irving, Eagle Wing, Dashing Wave, Dunford, M. R. Goffe, Emma Tyson, Peshtigo, Favorite, Sunshine, Wm. Brake, Green Boy, Sweepstakes, Kate Brainard, Hattie Wells, Glenifer, Magnet, O. J. Hale, Sonora, Racine, L. B. Forester, Minnie Orton, L. L. Lamb, Oreuac, Leader, Yankee, Wm. Grandy, Bahama, McBrier, Dobbins, Andrew Jackson, Comstock, Charlie Crawford, John Wesley, Mary Amelia, J. H. Magruder, Fargo, W. W. Stewart, St. Antoine, Dauntless, I. L. Quimby.

At Marysville, Mich: H. J. Kendall, Tom Scott, I. E. Mills, Pt. Abino, Alaska, City of the Straits, N. Mills, Jupiter.

At Sarnia, Ont., steamers: United Empire, Monarch, Lillie Smith, Dominion, J. C. Clark, James Beard, S. E. Curtis, McRae, Jessie.

Sailing vessels: Pandora, Southampton, Kathadin, Schelde, Prussia, Ontario, Fanny Campbell, Cataract, M. L. Breck, St. Clair, Oak Leaf, Azov, Ames, Corisande, Ferrett.

K. M. R. Co.

MILWAUKEE COMMERCE.

A report prepared at the office of the collector of customs shows the total lake traffic of the ports in the Milwaukee district during the present year, compared with the traffic carried on in 1893. The figures show a considerable increase in almost every item.

The total receipts by lake during the year 1894 were 5,920,462 tons, as compared with 5,299,358 tons in 1893, a gain of 621,104.

The total number of sailing vessels which arrived in the district were 3,741, compared with 3,294 in 1893, a gain of 447.

The entire number of arrivals of steamers in the district in 1894 was 6,329, against 4,630 in 1893, a gain of 1,699 or more than 33⅓ per cent.

The clearances in tonnage for the year 1894 were 5,975,698, against 5,308,341 in 1893, a gain of 667,357.

Sail craft clearances in 1894 were 3,803, compared with 3,374 in 1893, a gain of 429.

Propeller clearances during this year were 6,105, against 4,790 in 1893, a gain of 1,215.

Steamer clearances other than propellers in 1894 were 1,397, as compared with 1,503 in 1893, a loss of 106.

REPORTED BY THE LOOKOUT.

Minot I. Wilcox, of Toledo, has purchased the schooner John Rice, which was sold by United States Marshal Harmon.

The tug Frank Edwards, of Grand Haven, has been sold at marshal's sale to J. H. Graham, of Benton Harbor for $1,400.

There is some talk of changing the government lighthouse and supply station for the Tenth district from Buffalo to Erie.

Capt. W. E. Wright, for several seasons master of the steamer Veronica, will be given command of the Neosho in the spring. A master has already been selected for the Veronica, but his name is not given out for publication.

The schooner Mary Amelia, which left Port Huron on November 27 with a cargo of lath for Sandusky and was reported to have been lost, arrived all well on Saturday. She was out in the lake during three hard gales but weathered them all in comparative safety. She loaded coal this week at Sandusky for Port Huron.

According to the survey on the steamer Servia, which ran on a reef off Alpena and then had a collision with her consort Moravia, it will cost $20,000 to make needed repairs. That the Servia, after being so badly damaged and losing her shoe besides, could have proceeded on to Chicago towing her schooner is something of a wonder among vessel men, but shows the vessel's excellent construction.

The superintendent of the life-saving service in the Tawas district reports that during the year just closing there were 54 disasters in that region, involving in value of cargoes and vessels a total of $1,203,970. There were 418 persons on board, all of whom were saved. There were 51 people succored at the stations. Of the property in danger $1,113,940 was saved. There were four disasters involving a total loss of the vessels.

The whaleback steamer Pathfinder and her consort Sagamore have broken all records for the number of round trips made by a steamer and consort during the season. Since leaving Chicago April 5 last the Pathfinder and Sagamore have made 24 round trips, twenty-two of these being from Duluth to Ohio ports with iron ore. In all the two boats have carried about 120,000 gross tons of iron ore, 9,000 tons of coal and 500,000 bushels of grain.

According to the survey of the damage sustained by the steamer W. L. Wetmore, while on the rocks at Centerville, Wis., necessary repairs will involve an expenditure of about $13,500. Wrecking expenses and value of cargo jettisoned swell the total loss occasioned by the disaster to upwards of $17,000. Although no figures are given as the result of the survey of the damage sustained by the steamer Monteagle through stranding on Morgan's reef off Chicago, it is guessed on the outside that she cannot be repaired for less than $12,000. Wrecking expenses may bring the total loss by this disaster up to $17,500 or $18,000. The Monteagle was very badly shaken up. The steamer City of Fremont will winter at Manitowoc, where she is to receive important repairs and improvements at the shipyards of Burger & Burger at an estimated cost of $5,000.

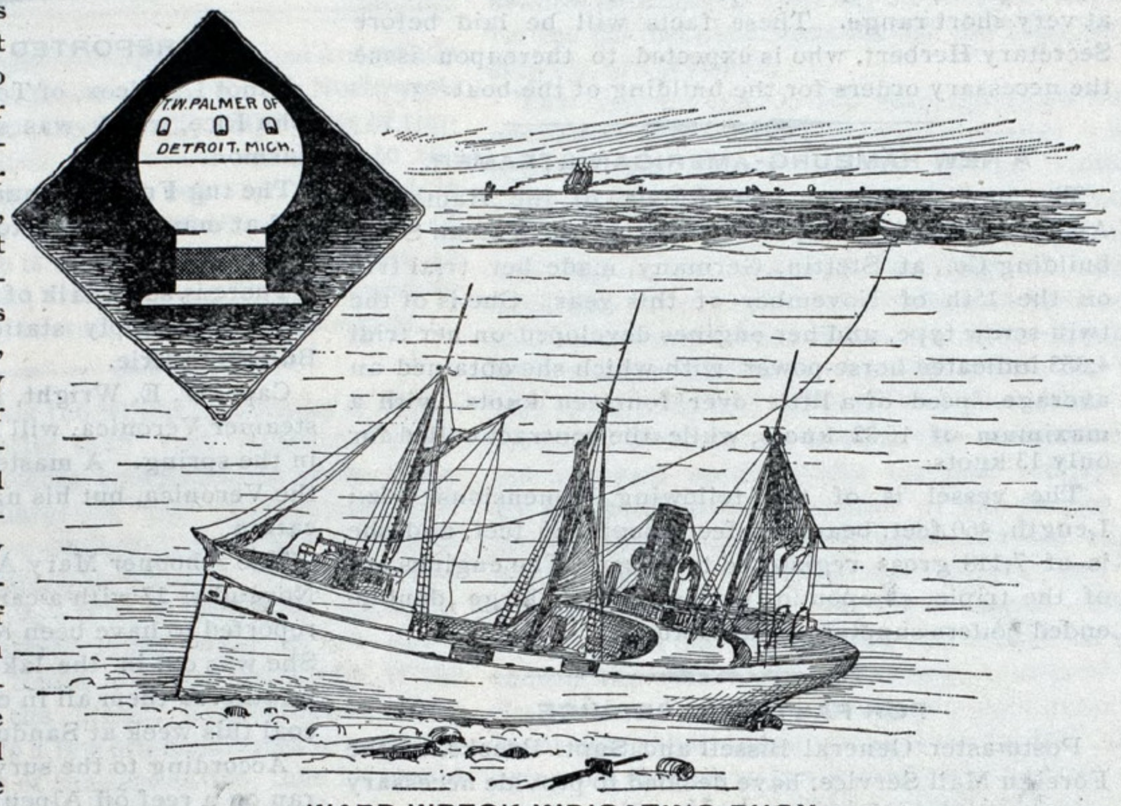
FOR LOCATING SUNKEN VESSELS.

(ILLUSTRATED.)

The Ward wreck indicating buoy patented and now being manufactured by the Frontier Iron Works, Detroit, Mich., is one of those appliances which in so many instances would prove of invaluable service to maritime and especially underwriters' interests in the event of a vessel foundering in moderately shoal water, and when every vestige of the sunken craft was below or clear of the surface.

We have before taken occasion to note this device as being susceptible of a wider application than the inventor originally intended it should be. The first idea was simply to point out the location of a foundered vessel or sunken object without the loss of time and expense involved in submarine diving, sweeping, grappling or using a water glass in endeavoring to find the sunken vessel.

Since the buoy has been perfected and officially tested it is found that its usefulness is not confined to marking and locating a sunken vessel, but with a modification of the patent it can be used for marking any object under the surface, and in this connection it would be of great service in marking permanent obstructions found season after season on the lakes by vessels touching but not accurately located, owing to the inability to secure a number of or any reliable cross bearings at the time of touching or grounding on the obstruction, hence, imperiling vessels at a later date. With a detached Ward buoy at hand this would in a measure be overcome, for if thrown overboard at any depth on the lakes the watcher or buoy would come to the surface in due course of time and warn other vessels of the danger until it was permanently buoyed or removed. The accuracy with which the ends of ocean telegraph cables have been picked up after a break has occurred, would not warrant the advocacy of their being marked at certain intervals by a surface watcher, such as the Ward buoy, but there are many similar instances wherein the buoy would, as we have said, prove invaluable to commercial and maritime interests.



WARD WRECK INDICATING BUOY.

BUFFALO COAL TRADE.

The following statistics prepared by Mr. William Thurstone, secretary of the Merchants' Exchange, shows the coal trade of Buffalo for the season of 1894, as compared with preceding years:

Railroad receipts and shipments of coal at Buffalo not reported by request. Receipts of coal this season and for the past three years, none. Shipments of coal westward by lake for the month of November, 443,050 net tons, as compared with 436,330 net tons in 1893, and 469,248 net tons in 1892; for the season to December 1, 1894, 2,386,405 net tons, as compared with 2,626,037 net tons in 1893, and 2,813,818 net tons in 1892. The receipts of coal by canal for the month of November, 8,862 net tons as compared with 3,887 net tons in 1893, and 6,622 net tons in 1892; the total receipts for the season of 1894, 39,149 net tons as compared with 69,932 net tons in 1893, and 53,451 net tons in 1892. The shipments of coal by canal for the month of November, 2,113 net tons as compared with 1,726 net tons in 1893, and 3,637 net tons in 1892; the total shipments for the season, 8,838 net tons as compared with 19,337 net tons in 1893, and 29,214 net tons in 1892. The aggregate shipments of coal by lake this season, to December 1, shows a falling off as compared with 1893, 233,632 net tons, and with 1892, of 427,475 net tons. The rates of freight were as follows, for the month of November, 1894: 60@75 cents to Chicago, 55@75 cents to Milwaukee, 30@35 cents to Duluth and Lake Superior ports, 25 cents to Toledo, 75 cents to Racine, 40 cents to Saginaw and Bay City. A year since the rates were, 50@60 cents to Chicago, Sheboygan and Milwaukee, 35@40 cents to Duluth and Lake Superior ports, 55@60 cents to Green Bay, 25@30 cents to Toledo and Detroit, 70@75 cents to Racine, 40 cents to Saginaw and 40@35 cents to Bay City.

The distribution of coal this season was as follows, to December 1st. (subject to trifling corrections): 1,053,017 tons to Chicago, 542,284 tons to Milwaukee, 246,264 tons to Duluth, 195,584 tons to West Superior, 45,300 tons to Gladstone, 91,200 tons to Toledo, 29,675 tons to Racine, 9,955 tons to Hancock, 1,300 tons to Houghton, 600 tons to Amherstburg, 8,125 tons to Kenosha, 37,586 tons to Green Bay, 9,161 tons to Detroit, 16,750 tons to Bay City, 16,405 tons to Saginaw, 11,915 tons to Port Huron, 425 tons to Port Stanley, 1,450 tons to Marinette, 17,150 tons to Marquette, 1,600 tons to Alpena, 1,450 tons to Washburn, 900 tons to Manistique, 1,300 tons to Kincardine, 3,400 tons to Sheboygan, 1,275 tons to Grand Haven, 600 tons to Mackinaw, 6,266 tons to Fort William, 1,407 tons tons to Windsor, 450 tons to East Tawas, 26,175 tons to Manitowoc, 6,800 tons to Sault Ste. Marie, 600 tons to Benton Harbor, 2,810 tons to Lake Linden, 600 tons to Send Beech, 8,110 tons to Ashland, 2,000 tons to Pt. Arthur 1,150 tons to Ludington, 400 tons to St. Ignace, 300 tons to Kelly Island, 2,305 tons to Cheboygan, 1,930 tons to Muskegon, 448 tons to Toronto, 650 tons to Owen Sound, 600 tons to Traverse City, 1,800 tons to Escanaba, 2,650 tons to St. Clair, 700 tons to Sarnia, 1,850 tons to Memominee, 1,290 tons to Hamilton, 650 tons to Michigan City, 1,710 tons to Marine City and 17,150 tons to places not specified.

CHICAGO WINTER MOORINGS.

There is now at Chicago a fleet large enough to carry 13,000,000 bushels of grain, this is nearly 2,000,000 bushels more than last winter's fleet could carry. There are 109 steamers and 82 schooners or 191 in all and last winter's fleet showed 16 more vessels, but with a less carrying capacity. There will be a number of transfers yet from Milwaukee, but the winter fleet at present consists of the following vessels:

Ashland, Arizona, Tom Adams, Alva, Baltic, I. J. Boyce, G. J. Boyce, C. H. Bielman, Brazil, C. H. Bradley, Brightie, J. G. Blaine, M. C. Bell, M. S. Bacon, H. A. Brown, Fayette Brown, Buffalo, City of Glasgow, City of Venice, City of Sheboygan, City of London, City of Paris, City of Berlin, S. S. Curry, Constitution, Commerce, Chemung, Cuba, Cayuga, W. S. Crosthwaite, Ahira Cobb, Caledonia, Cormorant, Canisteo, Centurion, Conemaugh, M. M. Drake, L. R. Doty, T. Davidson, John Duncan, Dundee, A. Everett, Eleanor, Elfin Mere, F. D. Ewen, S. P. Ely, William Edwards, C. A. Eddy, Selwyn Eddy, Elphicke, N. K. Fairbank, J. H. Farwell, R. P. Fitzgerald, Charles Foster, J. A. Francomb, J. C. Fitzpatrick, D. L. Filer, Frontenac, Parks Foster, R. L. Fryer, Germanic, F. W. Gifford, J. Godfrey, Golden Age, J. G. Gilchrist, City of Genoa, J. N. Glidden, Grampian, W. H. Gratwick (steel), W. H. Gratwick (wood), Halsted, E. C. Hutchinson, T. Howland, Hudson, Helvetia, Helena, G. T. Hope, J. J. Hill, H. A. Hawgood, Iron King, Iron Queen, Iron Chief, Iron Cliff, Iron Duke, Iron State, Iron City, Iron Age, H. R. James, H. J. Johnson, Jeanette, H. J. Jewett, Juniata, W. P. Ketcham, Fred Kelley, Ed. Kelley, Kearsarge, A. G. Lindsay, C. B. Lockwood, Lansing, Livingstone, Lotus, Lozen, Lake Forest, M. McLachlan, G. W. Morley, Marion, Mohawk, Moravia, J. W. Moore, Mecosta, Milwaukee, John Martin, Middlesex, Merida, E. McWilliams, C. P. Minch, A. Mosher, Miztec, James Mowatt, Northwest, Nicaragua, F. Neil, Narragansett, Nyanza, City of New York, John Oades, Olive Jeanette, John Owen, J. E. Owen, G. B. Owen, Ogarita, Our Son, John Plankington, Pueblo, Pomeroy, B. L. Pennington, Paisley, E. M. Peck, Progress, Pathfinder, T. L. Parker, A. A. Parker, B. W. Parker, Plymouth, T. W. Palmer, F. H. Prince, Pasadena, Queen of the West, G. W. Roby, Red Wing, R. Richards, May Richards, J. H. Rutter, R. R. Rhodes, R. P. Ranney, Gov. Smith, Adella Shores, H. W. Sage, S. M. Stephenson, Southwest, M. Slauson, Sciota F. E. Spinner, Siberia, George Spencer, Samoa, W. R. Stafford, Shawnee, San Diego, Servia, Shenandoah, A. Stewart, C. A. Street, Tuscarora, C. Tower, Toltec, A. D. Thomson, Tasmania, Uganda, Walter Vail, George Warmington. M. Woolson, C. Wall, D. C. Whitney, A. Weston, W. H. Wolf, G. F. Williams, Yuma, Yukon, 111, 127, 117, 110.

VESSELS WINTERING AT MILWAUKEE.

Through the courtesy of Capt. J. F. Trowell, ex-harbormaster at Millwaukee, it is learned that a total of 118 vessels with on aggregate gross tonnage of 70,256, are wintering at Milwaukee, not including tugs, fishery steamers and some small local tonnage. In the list are 53 large freight steamers having a tonnage of 28,111, twelve small steamers aggregating 3,055 tons, fifty schooners of 7,755 tons, two passenger steamers and the government steamer Andy Johnson.

The list of names at present are as follows, although some of the larger boats will later be transferred to Chicago for grain cargoes:

P. D. Armour, W. M. Egan, Ferdinand Schlessinger, Thomas Davidson, W. H. Wolf Fred Pabst, Helena, Veronica, Frank L. Vance, R. P. Flower, P. J. Ralph, Topeka, Maryland, Manchester, Manhattan, Massachusetts, Merrimac, Minnesota, Marion, Romania, J. H. Outhwaite, Pascal P Pratt, John Duncan, Neosho, Waverly, Interocean, W. L. Wetmoro, George H. Dyer, Lycoming, Codorus, R. P. Ranney, Monteagle, Samuel Marshall, Maggie Duncan, Westover, Alaska. Barges Amboy, Helvetia, A. M. Ash, H. A. Barr, A. T. Bliss, H. B. Alverson, Verona, Brunette, J. J. Borlum, G. W. Adams, H. C. Richards, R. C. Winslow, Harold, Metacomet, G. L. Warmington, Sidney O. Neff, John Schroeder, G. C. Markham, George Burnham, Joys, New Era, Rand, C. Hickox, Wm. Rudolph, Hilton, J. M. Allmindinger, W. J. Carter, St. Joseph, City of Fremont, Skater, Gov. steamer Andy Johnson. Schooners Fearless, L. A. Burton, J. C. Bauer, Wallahalla, A. Dall, Chas. E. Wyman, Quickstep, La Petite, Willie Loutitt, Wollin, Challenge, Lucia Simpson, Ebenezer, Pride, Grace Grummond, Black Hawk, Morning Star, L. W. Ferry, City of Toledo, E. Scoville, Waneetee, Dan Maber, Mary E. Cook, M. Ludwig, Active, C. Harrison, S. Thall, Lydia, Starke, Ida, Oneida, A. M. Beers, J. U. Porter, Maggie Thompson, Charles Luling, Annie O. Hausen, Boaz, Z. G. Simmonds, Leo, M. Capron, A. B. C. F. M., B. F. Wade, Elida, W. H. Chapman, J. B. Prime. Surprise, Conquest, Nancy Dell, Lavinda, Emily and Eliza.

NOTES.

AMONG the many artistic and useful calendars for 1895 which THE RECORD has been favored with this week, the Ashton Valve Co., of Boston, Mass., easily leads the fleet. The pictorial work on the 14x11 cardboard calendar which the Ashton Valve Co. issued for 1894 represented ,'Noontime at the Old Homestead," and this one follows with a still higher class of bronzed engraving entitled "Christmas Chimes," a veritable work of art.

DEAN BROS. Steam Pump Works, Indianapolis, Ind., have just issued their illustrated catalogue No. 19, for 1895, containing 134 pages and profusely illustrated with cuts of every class of pump manufactured. Differing somewhat from the usual run of trade catalogues the Messrs. Dean Bros. dispense with any preface page of testimonials or references and sail right in to show their patrons what they have, what they are doing and can do in the manufacture of pumps and the story is told and well told in catalogue No. 19.

EVERY effort will be made by the Lake Carriers' Association to have the following aids to navigation established, and already a memorial to Congress asking for the appropriations, and giving the reasons for each request has been drawn up: Light and fog signal, North Manitou Island, $20,000; light and fog signal, Middle Island, Lake Huron, $20,000; range lights and fog signal, Death's Door Passage (entrance to Green Bay), $21,000; light and fog signal, Crisp's Point, west of Whitefish Point, Lake Superior, $20,000; light and bell, Grand Marais harbor of refuge, $15,000; Grassy Island, Detroit River, ranges, $6,700; four gas buoys for Gravely Island and Lansing Shoal, $10,000; fog signal at Cathead Point, Lake Michigan, $5,500; and fog signal at Eagle Harbor, Lake Superior, $5,500.

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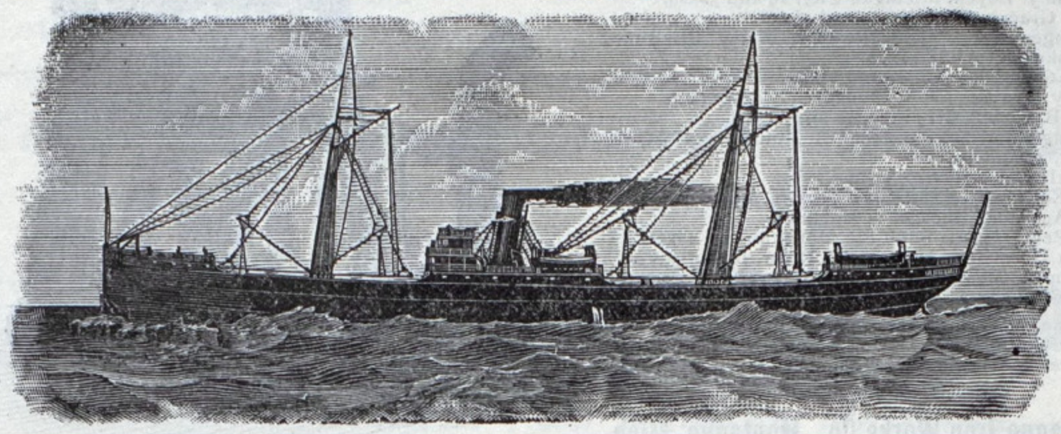

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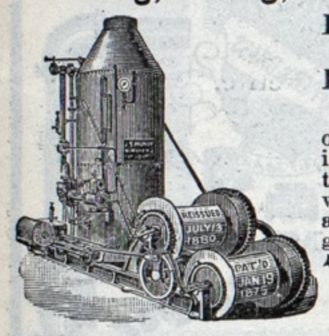

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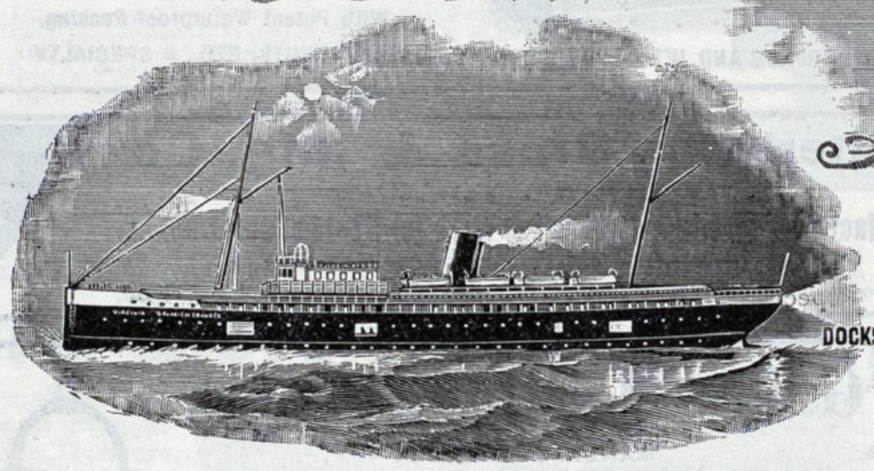

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THE CENTURY IN 1895.

Taking advantage of the general revival of interest in the Great Emperor, THE CENTURY will print during 1895

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Magnificently Illustrated.

THE CENTURY is famous for its great historical serials, and never in its history has a greater one been projected than this new "Life of Napoleon," written by Prof. William M. Sloane, of Princeton, who has spent many years in preparation for his work. Thus far no biography of "the man of destiny" has appeared in either English or French that is free from rancor and attentive to the laws of historical criticism. THE CENTURY HAS SECURED IT—THE GREAT, ALL-ROUND, COMPLETE AND INTERESTING HISTORY of the life of one of the most marvelous of men. No matter how much you already know of Napoleon, you will want to read this;—here is the concentration of all the lives and memoirs. THE ILLUSTRATIONS WILL BE MAGNIFICENT—the wealth of THE CENTURY'S art department will be lavished upon them. Two members of the staff have just returned from Paris, where they have been securing all that is best of Napoleonic material. New portraits will be printed, great historical paintings reproduced, and Castaigne and other modern artists have drawn anew some of the great scenes of Napoleon's life for this history.

In addition to this there will be

A NEW NOVEL BY MARION CRAWFORD.

The title is "CASA BRACCIO," and it is a romance of Italy, full of human passion and exciting episode.

A NEW NOVEL BY Mrs. Burton Harrison

will be published during the year. It is called "AN ERRANT WOOING," and is a tale of wandering (and love) among new scenes of travel in Northern Africa and Southern Spain.

Other Features

will be several familiar papers on "WASHINGTON IN LINCOLN'S TIME," by Noah Brooks, who was on terms of unusual intimacy with the War President; "THE CATHEDRALS OF FRANCE," by MRS. Schuyler Van Rensselaer, with illustrations by Joseph Pennell. Many more serials will be announced later.

Rudyard Kipling

contributes his FIRST AMERICAN STORY to the December number of THE CENTURY.

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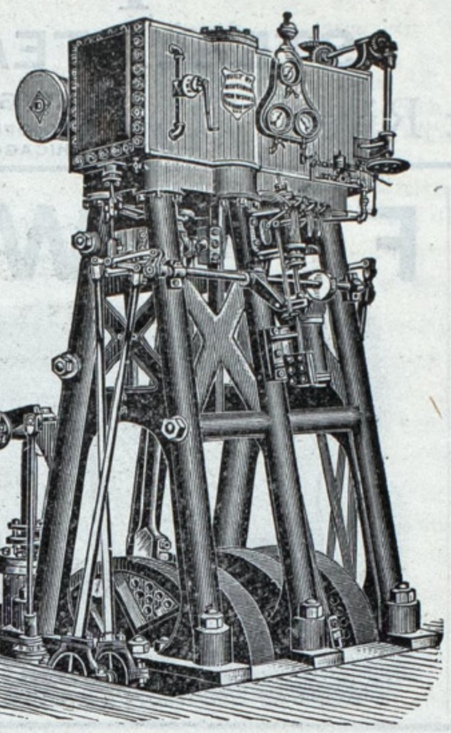

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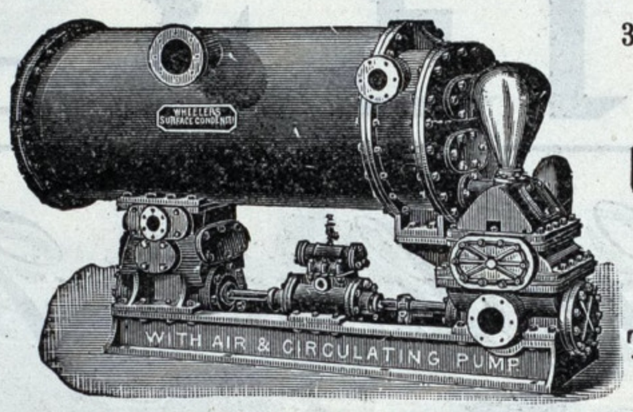

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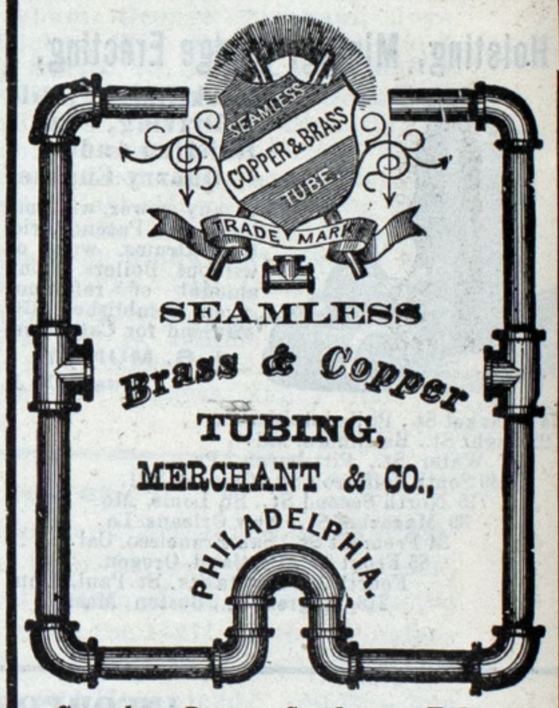

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Proposals for dredging in Quincy Bay, Ill. U. S. Engineer Office, Rock Island, Ill., November 28, 1894. Sealed proposals will be received here until 2 p. m., December 28, 1894, and then publicly opened, for dredging in Quincy Bay, Ill. All information furnished on application. A. MACKINZIE, Major, Corps of Engineers. 49-52

U. S. ENGINEER OFFICE, 601 Eighteenth Street, N. W., Washington, D. C., November 28, 1894. Sealed proposals for the construction of a sewerage system at Fort Monroe, Va., will be received here until 12 m., Saturday, December 29, 1894, and then publicly opened. All information furnished on application. CHAS. E. L. B. DAVIS, Major, Engineers. 49-52

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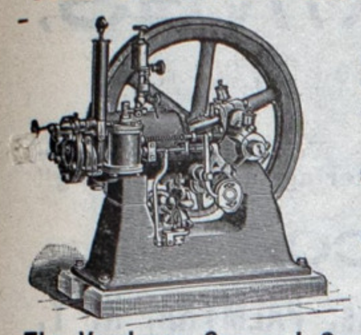

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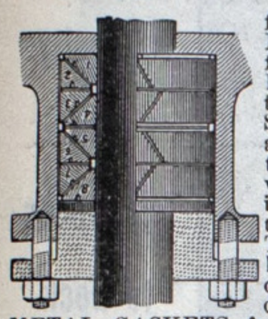

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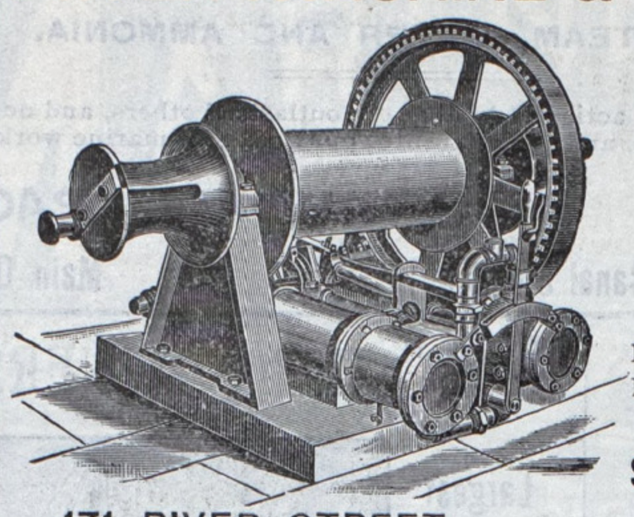

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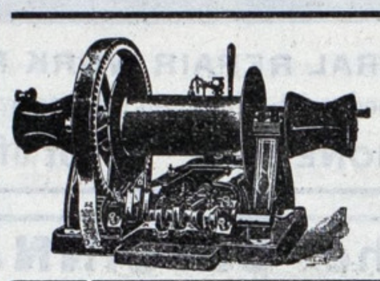

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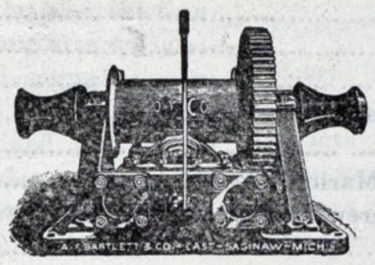

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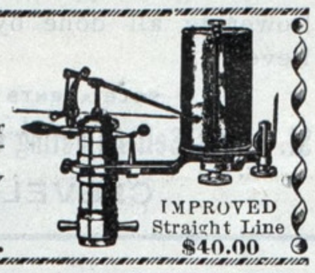

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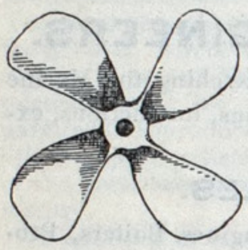

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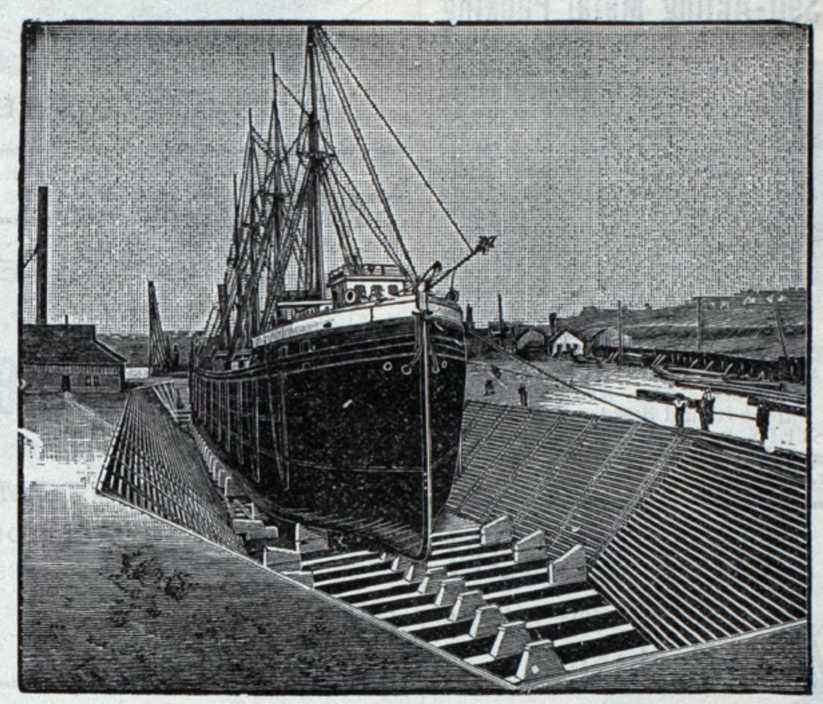

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